

CLAIMS

What is claimed is:

1. A method for making a film for use with a heat transfer component comprising the steps of:
  - 5       applying a plurality of polar particulates to a first surface of a film;
  - adhering said plurality of polar particulates to said first surface of said film; and
  - then adding said film to said heat transfer component.
2. The method as recited in claim 1 wherein said film is thermoplastic.
- 10       3. The method as recited in claim 2 further comprising the steps of:
  - heating said film; and
  - cooling said film.
- 15       4. The method as recited in claim 3 wherein the step of adhering said plurality of particulates comprises embedding said plurality of polar particulates into said heated first surface of said film by a roller assembly.
- 20       5. The method as recited in claim 1 wherein the step of adhering said plurality of polar particulates comprises pressing said plurality of particulate into an adhesive substance applied on said first surface of said film.

6. The method as recited in claim 1 wherein the step of adhering said plurality of polar particulates comprises pressing said plurality of particulate into a mixture of reactants applied on said first surface of said film.

5 7. The method as recited in claim 1 further comprising the step of coating an outer surface of said plurality of polar particulates to enhance adhesion of said plurality of polar particulates to said first surface of said film.

8. A film to improve wettability of a surface within a heat exchanger comprising:  
a film substrate having a first surface; and  
a plurality of polar particulates adhered to said first surface of said film substrate.
- 5 9. The film as recited in claim 8 wherein said film substrate is thermoplastic.
10. The film as recited in claim 9 wherein said film substrate is heated, and said plurality  
of polar particulates is adhered to said first surface of said film substrate by  
embedding said plurality of polar particulates into said heated first surface of said  
10 film substrate.
11. The film as recited in claim 8 wherein said plurality of polar particulates is adhered to  
said first surface of said film substrate by an adhesive substance applied on said first  
surface of said film substrate.
- 15 12. The film as recited in claim 8 wherein said plurality of polar particulates is adhered to  
said first surface of said film substrate by a mixture of reactants applied on said first  
surface of said film substrate.
- 20 13. The film as recited in claim 8 wherein a material coats an outer surface of said  
plurality of polar particulates to enhance adhesion of said plurality of polar  
particulates to said first surface of said film substrate.

14. A heat exchanger assembly comprising:

a plurality of condensing flow passages having a metal surface; and

a film to improve wettability of said metal surface of said heat exchanger including a film substrate having a first surface and a second surface adhered to said metal surface,

5 and a plurality of polar particulates adhered to said first surface of said film substrate.

15. The assembly as recited in claim 14 wherein said film substrate is thermoplastic.

16. The assembly as recited in claim 15 wherein said film substrate is heated and said  
10 plurality of polar particulates is adhered to said first surface of said film substrate by embedding said plurality of polar particulates into said heated first surface of said film substrate.

17. The assembly as recited in claim 14 wherein said plurality of polar particulates is  
15 adhered to said first surface of said film substrate by an adhesive substance applied on said first surface of said film substrate.

18. The assembly as recited in claim 14 wherein said plurality of polar particulates is  
adhered to said first surface of said film substrate by a mixture of reactants applied on  
20 said first surface of said film substrate.

19. The assembly as recited in claim 14 wherein a material coats an outer surface of said plurality of polar particulates to enhance adhesion of said plurality of polar particulates to said first surface of said film substrate.